federal emergency management agency

MOUNT ST. HELENS TECHNICAL INFORMATION NETWORK

Friday, June 20, 1980

BULLETIN #21 - "Aviation Considerations"

Safety information and recommended actions associated with aircraft exposure to volcanic ash were promptly distributed by the Federal Aviation Administration (FAA) and some aircraft and engine manufacturers after the first major eruption of Mount St. Helens. The immediate concern included exposure to ash in the air and on the ground. While the high altitude concentrations have diminished, recurrence associated with future volcanic activity can be expected and the possibility of ground contamination is a continuing problem.

Several incidents have been reported that involved flight through an ash cloud. Two airplanes that were briefly exposed to the airborne dust cloud with extremely high particulate concentration, had windshields and engine fan blades pitted. The most extreme example, which was reported in Aviation Week and Space Technology, involved exposure of a Transamerica Airlines Lockheed L-100 transport taking off from McChord A.F.B. at Tacoma, Washington, May 25, 1980. In less than five minutes exposure to a heavy concentration of ash, two turbines were destroyed and the other two were severely damaged. The radome, wing leading edges, propeller and windshields were reported to have sustained sandblast damage.

Extreme incidents such as these can be avoided. After each of the eruptions, data is provided through FAA Advisories and NOTAMs, (Notice to Airmen) forecasting the location of airborne dust clouds. Flight restrictions in the immediate vicinity of the volcano will be in effect